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The solid polymer electrolyte membrane prepared by the process of the present invention may be employed as is or as a component of the ion-exchange membrane of a solid polymer electrolyte chemical cell, such as a PEMFC. Accordingly, the present invention further provides a membrane prepared by the process of the present invention. The membrane prepared by the process of the present invention is suitable for use in a fuel cell. When for use in a fuel cell, the total thickness of the membrane is suitably less than 200µm and preferably less than 100µm.

IN THE CLAIMS:

Please replace claims 1-5, 8-14, and 16-22 with the following amended claims.

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- 1 1. (Amended) A process for preparing a solid polymer
2 electrolyte membrane comprising an ion-conducting polymer, a catalyst and a high
3 surface area supported material, which process comprises:
- 4 (a) associating the catalyst with the support material to form a
5 catalysed support; and
- 6 (b) combining the catalysed support with the ion-conducting
7 polymer.
- 1 2. (Amended) A process according to claim 1, wherein step (b)
2 comprises combining the catalysed support with the ion-conducting polymer in a
3 liquid medium that is aqueous-based and is essentially free from organic solvents.
- 1 3. (Amended) A process according to claim 1, wherein the
2 catalyst comprises one or more precious metals, or combinations thereof, and/or
3 other transition group metals.
- 1 4. (Amended) A process according to claim 1, wherein the
2 catalyst comprises platinum.
- 1 5. (Amended) A process according to claim 1, wherein the
2 catalyst is deposited onto the support material to a loading of between 0.01 to
3 50.0% by weight of the total catalysed support.